

**A NEW GENUS OF SUCTOBLBIDAE FROM  
NORTHWESTERN UNITED STATES<sup>1</sup>**

(ACARI: CRYPTOSTIGMATA)

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**ABSTRACT**—*Rhinosuctobelba dicerosa*, n. gen. and n. sp., is described from Lake Goodwin, Washington, and is distinguished from *Zeasuctobelba* Hammer and *Suctobelba* Paoli by the absence of rostral teeth and notogastral projections, larger size, lateral rostral horns, type of sensillus and 6 genital hairs.

Forsslund (1941, 1958) discussed the characteristics of the genus *Suctobelba* Paoli and described several species. He reduced the genera *Suctobellbella* and *Suctobellbila* of Jacot (1937, 1938) to sub-generic status. Hammer (1952) described a new species of *Suctobelba* from Canada and recorded three of Forsslund's species from that locality. She also (1958, 1961, 1962) described several new species of *Suctobelba* from various areas of South America.

In her first volume of the oribatids of New Zealand, Hammer (1966) also described a new genus of suctobelbid mites characterized by lateral tips on the rostrum, the absence of rostral teeth, and a bifurcated acanthion on the palp tarsus. This genus, *Zeasuctobelba*, appears to be a complex of forms judging from some of its characters, but is comparable in certain aspects to new forms we have studied.

In a collection of mites from Washington we found a series of suctobelbid mites, most closely resembling *Suctobelba* and *Zeasuctobelba*, yet differing in a number of ways. We consider that this series of mites represents a new genus and species within the Suctobelbidae. The bases for these distinctions and designations are discussed below with the diagnosis and description of the new genus and species.

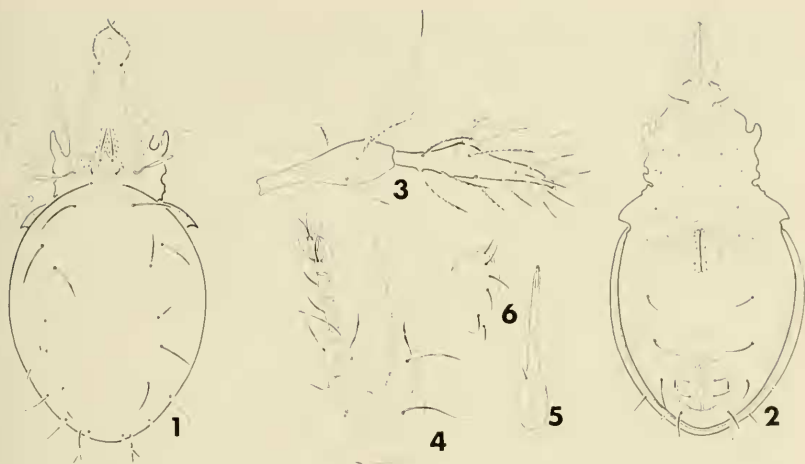
***Rhinosuctobelba*, n. gen.**

*Diagnosis:* Rostrum without lateral rostral teeth, elongated into a snout or nose with two large lateral horns, sensillus elongated and clavate, anterior margin of notogaster entire, without tooth-like projections, six pairs of genital setae present. The generic name is derived from the Greek, *rhinos*, implying snout or nose and refers to the anterior rostral prominence as well as the lateral projections of this snout. The general appearance of the organism is like *Suctobelba*, but larger, without rostral teeth and the anterior notogastral projections. The lateral horns on the rostrum and the bifurcated acanthion of the palp tarsus resemble *Zeasuctobelba*, but the larger size, the length of the rostrum and prodorsum, the

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Figs. 1-6, *Rhinosuctobelba diceros*, n. gen., n. sp.: 1, dorsal view, legs partially omitted; 2, ventral view, legs omitted; 3, tibia-tarsus, dorsolateral view; 4, infracapitulum, showing fused spatulate gena and rutella, palp with bifurcated acanthion; 5, chelicera; 6, genital plate, showing positions of genital setae.

ratio of prodorsal length to notogastral length, the type of sensilli, the lack of anterior marginal notogastral projections and the presence of six genital setae distinguished the new genus from *Zeasuctobelba* and other known genera.

Type-species: *Rhinosuctobelba diceros*, n. sp.

#### ***Rhinosuctobelba diceros*, n. sp.**

(Figs. 1-6)

**Diagnosis:** With characteristics of the genus, infracapitulum and chelicerae attenuated as in other Suctobelbidae, but with fusion of rutella into long, spatulate or spoon-like projections; the name is derived from the Greek, *dikeros*, implying double horn, referring to the rostral horns.

**Description:** Color reddish-brown; rostrum attenuated, narrowly rounded anteriorly, appearing as a tube from above, with a lateral triangular, blunt tooth or horn each side; rostral hairs curved, slightly barbed, longer than rostrum anterior to lateral horns, inserted in anterior surface of each horn; central surface of prodorsum smooth except in region of lamellar hairs, tuberculated as in fig. 1; tutorial ridges curved, tuberculated laterally, confluent with anterior sclerotization of rostral horns; lamellae small knobs at level of posterior distal tips of tutorial ridges; lamellar hairs simple, about three times as long as distance between insertions; translamella (?) an anteriorly projecting point between insertions of lamellar hairs; interlamellar hairs short, fine, separated by about twice their lengths; pseudostigmata rounded, with cup-like depressions and rough rims; sensillus elongated, club-like, curved upward and laterally in most specimens; pedotecta I angled anterolaterally, pedotecta II, III nearly absent, acetabulae of legs II, III pits in lateral margin of body, pedotecta IV blade-like, decurved posteriorly, tuberculated on surface.

Hysterosoma oval in outline, anterior margin without projections, dorsosejugal suture indistinct medially (in dissected specimens the anterior margin is separable); dorsum with 10 pairs of long hairs (fig. 1).

Camerostome with a broadened base, attenuated anteriorly, infracapitulum elongated (fig. 4), mentum squarish, gena-rutella fused and spatulated anteriorly; chelicerae attenuated, fixed digits and movable digits elongated (fig. 5); palps with bifurcated acanthion at distal tip; ventral setae, apodemata as in fig. 2; pre-genital apodeme arched anterior to genital opening; genital covers with six pairs of simple setae, g:1-4 in line in anterior half of cover, g:5-6 posterior; anal opening squarish, each anal cover with two setae; aggenital setae longer than genital setae, displaced laterally, closer to genital opening than to anal; ad:3 longest of three adanal setae, others subequal in length; fissure *iad* between insertion levels of anal setae near margin of anal opening.

Legs monodactylous (fig. 3).

*Measurements*: length: 642 $\mu$ , prodorsum 222 $\mu$ , hysterosoma 420 $\mu$ ; width: 318 $\mu$ .

*Collection data*: Fourteen specimens, 13 males and 1 female, were collected at Lake Goodwin, near Marysville, Washington, 29 June 1968, by H. G. Higgins. The type, a male, and a paratype will be deposited in the U. S. National Museum.

*Discussion*: The new species is similar in some respects to *Zeasuctobelba quinquenodosa* Hammer, 1966, but in the new species the rostrum is much more elongated, the lateral rostral horns are more pronounced, the surface of the prodorsum is more tuberculate, the sensilli more elongated clubs; the ventral groove behind the camerostome is absent, and the anterior margin of the hysterosoma is lacking the four anterior projections of *Zeasuctobelba*. A principal difference between the new genus and the other genera is the six pairs of genital setae instead of the five pairs found in *Zeasuctobelba* and *Suctobelba*.

It appears that the genus *Zeasuctobelba*, as Hammer (1966) described it, is really a complex of related species rather than a well-defined genus. The anterior hysterosomal projections are similar to species of *Suctobelba*, but the sensilli in the three species of *Zeasuctobelba* are of several varieties—from nearly globose-capitate to lanceolate and spindleform. The complex of representatives is apparently related to other genera in the family like *Suctobelba*, but the definitive nature of these relationships has yet to be worked out.

Jacot (1937) was cognizant of the genus *Suctobelba* and, although he did not describe species in this genus from the United States, he segregated the genera *Suctobelbella* and *Suctobelbilla* as related to that genus. *Rhinosuctobelba dicerosa* is a new representative of the Suctobelbidae. It represents a new record for the family in the United States inasmuch as *Suctobelbella* and *Suctobelbilla* of Jacot are of uncertain status though tentatively included in *Suctobelba*. Species of *Suctobelba* are known in the collections within the U. S., but none is described in the literature to our knowledge.

Another remarkable feature of the new species is the peloptiform

chelicerae, the spatulate tips of the infracapitulum and the tube-like extension of the rostrum. The adaptive features are probably correlated with the type of food consumed, but they represent another interesting modification of mouth parts in the oribatids that has yet to be related to the biology of the mites.

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**THE GENUS *SUSANA* ROHWER AND MIDDLETON**  
(HYMENOPTERA: TENTHREDINIDAE)

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ABSTRACT—A key and descriptions are given for the six known species of *Susana*. Four new species, *annulata*, *oregonensis*, *punctata*, and *rufa*, are described. The larvae of the genus are also described. *Susana* is found only in western North America where it is associated with *Juniperus* and *Cupressus*.

Rohwer and Middleton (1932) described the genus *Susana* and included only the type species, *S. cupressi*, described at the same time. Later, a species described by Rohwer (1911) as *Platycampus juniperi* was transferred to *Susana* by Ross (1937). These have been the only known species in *Susana*. After I examined the specimens of this genus in the collection of the U. S. National Museum, and

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